

C5.6 Concrete Slab

See the Office of Bridges and Structures web site for archived Methods Memos listed under articles in this section.

The Methods Memos for which policies have been partially revised and/or for which document references have been updated are noted as partially revised. Any obsolete Methods Memos that apply to this section are listed at the end.

C5.6.2 CCS LRFD

C5.6.2.1 General

C5.6.2.1.1 Policy overview

C5.6.2.1.2 Design information

C5.6.2.1.3 Definitions

C5.6.2.1.4 Abbreviations and notation

C5.6.2.1.5 References

C5.6.2.2 Loads

C5.6.2.2.1 Dead

For design under the AASHTO standard specifications the office considered the edge strip to be relatively narrow, only the width of the railing plus half the depth of the slab. When 25% of the dead load of the railing directly above was applied to the edge strip, the overall distribution of the railing loads to the bridge cross section was conservative. Under LRFD, however, the edge strip is much wider, usually 6 feet (1.829 m), and applying only 25% of the railing load to the edge strip would be unconservative. Therefore, the portion of the railing load to be applied to the edge strip was increased to 50%. With the increase, the railing load distribution is conservative for any bridge width more than 24 feet (7.315 m). At 24 feet (7.315 m), half the railing load will be applied to 6-foot (1.829-m) wide edge strips and half the load to the remainder of the cross section. For greater bridge widths the remainder of the cross section will be designed to carry more than half the railing load.

C5.6.2.2.2 Live

C5.6.2.2.3 Impact

C5.6.2.2.4 Railing

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C5.6.2.2.5 Earth pressure

C5.6.2.2.6 Earthquake

C5.6.2.2.7 Construction

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1 January 2008

C5.6.2.3 Service Load Groups

C5.6.2.4 Continuous slabs

C5.6.2.4.1 Analysis and design

C5.6.2.4.1.1 Analysis assumptions

C5.6.2.4.1.2 Materials

C5.6.2.4.1.3 Design resistance

C5.6.2.4.1.4 Strip properties

C5.6.2.4.1.5 Moment

C5.6.2.4.1.6 Shear

C5.6.2.4.1.7 Camber and deflection

C5.6.2.4.1.8 Fatigue

C5.6.2.4.1.9 Additional considerations

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C5.6.2.4.2 Detailing

Methods Memo No. 10: Closure Pours
30 August 2001

Partially revised: Methods Memo No. 144: Revised Policy for Transverse Joints for CCS and PCBM
Bridges
1 February 2008

Partially revised: Methods Memo No. 51: Revision to Top of Slab Elevation Sheet
5 February 2002

Partially revised: Methods Memo No. 81: Deck Drains
24 March 2005

Obsolete: MM No. 183: Policy Regarding Construction Loading
1 January 2008

| **Obsolete: Methods Memo No. 186: Revision Open Rail Details to J24-06, J30-06, J40-06, J44-06
5 November 2007 (These corrections have been made.)**